



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/532,006	04/19/2005	Takashi Matsumoto	2005_0622A	3824

513 7590 04/09/2007  
WENDEROTH, LIND & PONACK, L.L.P.  
2033 K STREET N. W.  
SUITE 800  
WASHINGTON, DC 20006-1021

EXAMINER
----------

FOX, BRYAN J

ART UNIT	PAPER NUMBER
----------	--------------

2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/09/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/532,006

Applicant(s)

MATSUMOTO, TAKASHI

Examiner

Bryan J. Fox

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 19 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "the packet" in lines 13 and 19 of page 24 and lines 3 and 6 of page 25, whereas a plurality of packets was introduced in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the next packet" in lines 12 and 15 of page 25, whereas a plurality of packets was introduced in line 9. There is insufficient antecedent basis for this limitation in the claim.

Claim 1 recites the limitation "the radio communication terminal" in lines 7 and 17-18 of page 24, whereas one or more radio communication terminals were introduced. There is insufficient antecedent basis for this limitation in the claim.

Claim 2 recites the limitation "the packet" in line 18 page 25, whereas a plurality of packets was introduced. There is insufficient antecedent basis for this limitation in the claim.

Claim 3 recites the limitation "the packet" in lines 4 and 12 of page 26, whereas a plurality of packets was introduced. There is insufficient antecedent basis for this limitation in the claim.

Art Unit: 2617

Claim 3 recites the limitation "the next packet" in lines 16-17 and 19 of page 26, whereas a plurality of packets was introduced. There is insufficient antecedent basis for this limitation in the claim.

Claim 4 recites the limitation "the packet" in lines 3 and 9 of page 27, whereas a plurality of packets was introduced. There is insufficient antecedent basis for this limitation in the claim.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1; 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jo et al (US 20030112753A1) in view of Taketsugu et al (US005740167A).

Regarding claim 1, Jo et al disclose a source departure time of the data packet is recorded in the source departure time filed (see paragraph 39) that is compared to a current time and an acceptable delay time (see paragraph 52) and either discarded or

Art Unit: 2617

transferred accordingly (see paragraphs 54-56), which reads on the claimed, "information embedding means for, when successively transmitting a plurality of packets to another ...terminal in the local network or to the access relaying apparatus, embedding time information in a packet to be transmitted, the abandonment time information being information of a time until a packet to be transmitted next to the packet, when left unsent, is abandoned through time out control," and, "transmission means for transmitting the packet having abandonment time information embedded by the information embedded means into the local network." In the case of receiving the data packet, the divider divides the data packet into the header and the payload and provides the header to the header processing unit (see paragraph 41), which reads the source departure time (see paragraph 44), which reads on the claimed, "reception means for receiving all packets of data transmitted by the transmission means; reading out means for reading out abandonment time information contained in the packet received by the reception means." The source departure time of the data packet (see paragraph 39) is compared to a current time and an acceptable delay time (see paragraph 52) and either discarded or transferred accordingly (see paragraphs 54-56), which reads on the claimed, "determination means for determining whether or not the reception means has received a packet next to the packet received by the reception means before a time contained in the abandonment time information read out by the reading out means elapses; and transmission right granting means for, if the determination means determines that the reception means has not received the next packet before the time contained in the abandonment time information elapses,

Art Unit: 2617

compulsorily granting to a...terminal trying to transmit the next packet a transmission right to transmit the next packet.” Jo et al fail to disclose the use of radio communication or carrier sense means for determining whether a radio transmission line between the other radio communication terminal or the access relaying apparatus and the radio communication terminal is available or not.

In a similar field of endeavor, Taketsugu et al disclose a busy/idle field that indicates whether a channel is idle (see column 5, lines 43-60) in a cellular communication system (see column 4, lines 3-21), which reads on the claimed, “carrier sense means for determining whether a radio transmission line between the other radio communication terminal or the access relaying apparatus and the radio communication terminal is available or not.”

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Jo et al with Taketsugu et al to include the above use of the busy/idle field in a cellular communication system in order to allow the accessing of a common channel from a plurality of terminal as suggested by Taketsugu et al (see column 1, lines 53-61).

Regarding claim 2, the combination of Jo et al and Taketsugu et al disclose different types of packets (see e.g. Jo et al paragraph 32), which reads on the claimed, “the information embedding means embeds the abandonment time information only when the packet to be transmitted is a specific kind of packet.”

Regarding claim 3, Jo et al disclose a source departure time of the data packet is recorded in the source departure time filed (see paragraph 39) that is compared to a

Art Unit: 2617

current time and an acceptable delay time (see paragraph 52) and either discarded or transferred accordingly (see paragraphs 54-56), which reads on the claimed, "when successively transmitting a plurality of packets to another...terminal in the local network or to the access relaying apparatus, the...terminal embeds, for transmission, abandonment time information in a packet to be transmitted, the abandonment time information being information of a time until a packet is to be transmitted next to the packet, when left unsent, is abandoned through time-out control." In the case of receiving the data packet, the divider divides the data packet into the header and the payload and provides the header to the header processing unit (see paragraph 41), which reads the source departure time (see paragraph 44), which reads on the claimed, "reception means for receiving all packets of data transmitted by the transmission means; reading out means for reading out abandonment time information contained in the packet received by the reception means." The source departure time of the data packet (see paragraph 39) is compared to a current time and an acceptable delay time (see paragraph 52) and either discarded or transferred accordingly (see paragraphs 54-56), which reads on the claimed, "determination means for determining whether or not the reception means has received a packet next to the packet received by the reception means before a time contained in the abandonment time information read out by the reading out means elapses; and transmission right granting means for, if the determination means determines that the reception means has not received the next packet before the time contained in the abandonment time information elapses, compulsorily granting to a...terminal trying to transmit the next packet a transmission

Art Unit: 2617

right to transmit the next packet.” Jo et al fail to disclose the use of radio communication.

In a similar field of endeavor, Taketsugu et al disclose a cellular communication system (see column 4, lines 3-21).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Jo et al with Taketsugu et al to include the above cellular communication system in order to allow the accessing of a common channel from a plurality of terminal as suggested by Taketsugu et al (see column 1, lines 53-61).

Regarding claim 4, Jo et al disclose a source departure time of the data packet is recorded in the source departure time filed (see paragraph 39) that is compared to a current time and an acceptable delay time (see paragraph 52) and either discarded or transferred accordingly (see paragraphs 54-56), which reads on the claimed, “information embedding means for, when successively transmitting a plurality of packets to another...terminal in the local network or to the access relaying apparatus, embedding abandonment time information in a packet to be transmitted, the abandonment time information being information of a time until a packet to be transmitted next to the packet, when left unsent, is abandoned through time out control,” and, “transmission means for transmitting the packet having abandonment time information embedded by the information embedded means into the local network.” Jo et al fail to disclose the use of radio communication or carrier sense means for determining whether a radio transmission line between the other radio communication



Art Unit: 2617

terminal or the access relaying apparatus and the radio communication terminal is available or not.

In a similar field of endeavor, Taketsugu et al disclose a busy/idle field that indicates whether a channel is idle (see column 5, lines 43-60) in a cellular communication system (see column 4, lines 3-21), which reads on the claimed, "carrier sense means for determining whether a radio transmission line between the other radio communication terminal or the access relaying apparatus and the radio communication terminal is available or not."

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Jo et al with Taketsugu et al to include the above use of the busy/idle field in a cellular communication system in order to allow the accessing of a common channel from a plurality of terminal as suggested by Taketsugu et al (see column 1, lines 53-61).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox  
March 30, 2007



CHARLES N. APPIAH  
SUPERVISORY PATENT EXAMINER